

WHAT IS CLAIMED IS:

1. A data log acquisition circuit for acquiring a data log in correspondence with a test pattern in a test by using  
5 an IC tester, comprising:
  - a number-of-patterns output section adapted to count a number of an executed test pattern and output a count value thereof;
  - an identity signal output section adapted to compare one  
10 of an address of the test pattern and the count value with a predetermined reference value and output an identity signal when the one of the address and the number of the executed test pattern and the predetermined reference value are data for the same test pattern;
  - 15 an output flag control section adapted to control an output flag on a basis of setting of an operation mode when the identity signal outputted by the identity signal output section is inputted;
  - a write address output section adapted to generate and  
20 output a write address of the data log when the output flag is inputted by the output flag control section;
  - a data log output section adapted to output the data log

at a timing adjusted for writing the address of the test pattern  
as a data log;

a storage section adapted to store the data log outputted  
by the data log output section together with the write address  
5 inputted from the address output section.

2. The data log acquisition circuit according to claim  
1, further comprising:

a held data output section adapted to hold the data log  
10 and the write address to be stored in the storage section  
temporarily to output the data log and the write address; and  
a number-of-FAIL-signals output section adapted to count  
and output the number of FAIL signal<sup>s</sup> when the FAIL signal is  
generated.

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3. The data log acquisition circuit according to claim  
2, wherein the held data output section further including:

a control flag output section adapted to output a control  
flag when the FAIL signal is generated; and  
20 a clock signal mask section adapted to output a clock  
signal masked with the control flag outputted by the control  
flag output section,

wherein the held data output section holds the data log and the write address in synchronism with the clock signal outputted by the clock signal mask section.

5           4. A data log acquisition method in a data log acquisition circuit for acquiring a data log in correspondence with a test pattern in a test by using an IC tester, comprising the steps of:

              counting a number of an executed test pattern;

10          outputting the counted value;

              comparing one of an address of the test pattern and the counted value with a predetermined reference value;

              outputting an identity signal when the one and the predetermined reference value are data for the same test

15          pattern;

              controlling an output flag on a basis of setting of an operation mode when the identity signal is outputted;

              generating and outputting a write address of the data log when the output flag is outputted;

20          outputting the data log at a timing adjusted for writing the address of the test pattern as a data log; and

              storing the data log outputted together with the write

address outputted.

5. The data log acquisition method according to claim  
4, further comprising the steps of:

5 outputting the data log and the write address to be stored  
after holding the data log and the write address temporarily;  
and

counting and outputting the number of a FAIL signal when  
the FAIL signal is generated.

10 6. The data log acquisition method according to claim  
5, further comprising the steps of:

outputting a control flag when the FAIL signal is  
generated; and

15 outputting a clock signal masked with the control flag,  
wherein the said data log and said write address are held  
in synchronism with the clock signal.